** Design & Technology**

**Specialist Marking Tools**

**Materials required for questions**

* Pencil
* Rubber
* Calculator

**Instructions**

* Use black ink or ball-point pen
* Try to answer all questions
* Use the space provided to answer questions
* Calculators can be used if necessary
* For the multiple choice questions, circle your answer

**Advice**

* Marks for each question are in brackets
* Read each question fully
* Don’t spend too much time on one question

**Good luck!**

**Q1.** What is the name of the tool shown in the image below

Hands holding a wood planer

Description automatically generated

**A** Try square

**B** Calliper

**C** Mortise gauge

**Q2.** What is the name of the tool shown in the image below

A drawing of a compass

Description automatically generated

**A** Odd leg callipers

**B** Dividers

**C** External callipers

**Q3.** What is the use of the tool shown in the image below

A digital caliper with a screen

Description automatically generated

**A** Measuring density

**B** Measuring thickness

**C** Measuring opacity

**Q4.** Which one of the following is used to test tolerance?

**A** Try square

**B** Go no-go gauge

**C** Jig

**Q5.** State two ways a jig can improve accuracy during production. **(4 marks)**

**Answers**

**Q1.** C **Q2.** B **Q3.** B

**Q4.** B

**Q5.**

* A jig improves accuracy by removing the need for measuring and marking out to take place each time a cut is made or a hole drilled. This removes the potential for human error throughout the marking out process.
* A jig can improve the accuracy of manufacturing a particular joint, by securely holding the workpiece while also guiding the cutting tool, eg when cutting a mitre joint in timber or when drilling a hole.
* A jig can be used to ensure consistency when manufacturing a product, eg guiding a router around a particular profile ensuring consistency and accuracy where two kitchen worksurfaces may join.